	Application No.	Applicant(s)
Notice of Allowability	10/614,587	SHANBHAG ET AL.
	Examiner	Art Unit
	Lawrence B. Williams	2611
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to <u>after final amendment filed on 21 September 2007</u> .		
2. The allowed claim(s) is/are <u>1-20</u> .		
<ul> <li>3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some* c) None of the: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No.</li> <li>Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* Certified copies not received:</li> </ul>		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.		
(a) 🔲 including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1)  hereto or 2)  to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
<ol> <li>DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ol>		
•	,	
Attachment(s)		
1. Notice of References Cited (PTO-892)	5. Notice of Informal Pa	• •
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Summary	(PTO-413),
3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date	Paper No./Mail Date 7. ☐ Examiner's Amendm	e nent/Comment
Examiner's Comment Regarding Requirement for Deposit of Biological Material	<ul><li>8.</li></ul>	nt of Reasons for Allowance

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## REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: The instant application discloses an equalizer. A search of prior art records has failed to teach or suggest, alone or in combination:

"an equalizer comprising: a feedforward filter adapted to receive a first input signal and provide a first output signal; an adaptive coefficient generator adapted to receive the first input signal and a second signal and provide tap coefficients to the feedforward filter; a slicer adapted to receive a slicer input signal and provide a slicer output signal; a slicer timing alignment block adapted to receive the slicer input signal and provide a second output signal, wherein the slicer output signal is subtracted from the second output signal to generate an error signal; a tap timing alignment block adapted to receive the slicer output signal and provide a third output signal; a first low pass filter adapted to receive the third output signal and the error signal and provide a fourth output signal, wherein the fourth output signal is multiplied with the third output signal to provide a feedback signal which is added m the first output signal to generate the slicer input signal; and a second low pass filter adapted to receive the error signal and provide a mean square error signal" as disclosed in claim 1.

"an equalizer comprising: means for receiving a first input signal and providing an equalized output signal; means for receiving the first input signal and providing tap coefficients to the means for providing the equalized output signal; a slicer adapted to receive a slicer input signal and provide a slicer output signal; means for generating an error signal based on the slicer output signal and a delayed version of the slicer input signal; means for generating a feedback signal, which is summed with the equalized output signal to generate the slicer input signal,

wherein the means for generating a feedback signal comprises: a tap timing alignment block adapted to receive the slicer output signal and provide a first output signal; and a low pass filter adapted to receive the first output signal and the error signal and provide a second output signal, wherein the second output signal is multiplied with the first output signal to generate the feedback signal; and means for generating a mean square error signal based on the error signal" as disclosed in claim 17.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## **CONCLUSION**

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037. The examiner can normally be reached on Monday-Friday (8:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ghayour Mohammad can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

lbw

September 26, 2007

MOHAMMED GEAYOUR SUPERVISORY PATENT EXAMINER